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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/601,687

06/23/2003

Thomas C. Russell

ED0101

7982

40582

7590

09/02/2009

AIR LIQUIDE

Intellectual Property

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HOUSTON, TX 77056

EXAMINER

GAMI, TEJAL

ART UNIT

PAPER NUMBER

2121

MAIL DATE

DELIVERY MODE

09/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/601,687	Applicant(s) RUSSELL ET AL.	
	Examiner TEJAL J. GAMI	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) 7-10, 12 and 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to an ELECTION/RESTRICTION entered April 27, 2009 and an APPEAL BRIEF filed December 15, 2008 for the patent application 10/601687. This action is made non-final due to the introduction of at least one new grounds of rejection.

Election/Restrictions

2. Applicant's election with traverse of claims 1-6 and 21-23, in the reply filed on April 27, 2009 is acknowledged.

Claims 7-10, 12, and 14-20 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made with traverse in the reply filed on 04/27/2009.

Applicant's argue the Restriction/Election requirement is "traversed because Group I and II are both drawn to the same invention, with the desired result being SCADA systems for distributed control. As the desired result for both groups is identical, the structuring of these claims should not present an undue burden on the Examiner for search purposes. The Applicants respectfully contend that this is particularly true in light of the fact that the Examiner had previously (i.e. prior to Appeal) examined these claims together without any undue burden." In direct response to applicant's arguments, the

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claims are patentably distinct thereby requiring a separate search for each restricted group.

Status of Claims

3. Claims 1-10, 12, and 14-23 were rejected in the last Office Action dated May 13, 2008.

Claims 7-10, 12, and 14-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

As a response to the May 13, 2008 office action, Applicant filed an Appeal Brief. Prosecution was reopened and as a response to an election/restriction requirement, applicant's elected with traverse claims 1-6 and 21-23.

Claims 1-6 and 21-23 now remain under consideration in this Office action. Applicant is reminded that the non-elected claims 7-10, 12, and 14-20 must be canceled from this application if the office finds that the claims 1-6 and 21-23 under consideration are allowable and the application in condition for allowance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Kodosky et al. (U.S. Publication Number: 2003/0184595).

As to independent claim 1, Kodosky discloses in an industrial equipment network for interconnecting a plurality of devices (e.g., industrial automation system) (see Figure 2B; and Paragraph [0047]), apparatus for permitting an associated SCADA system (e.g., supervisory control and data acquisition) (see Paragraph [0125]) to be self-configuring (e.g., configuring) (see Abstract), comprises:

a plurality of controllers dedicated to each one of said plurality of devices (e.g., controllers) (see Paragraph [0003]), respectively, for providing each with control and data functions for interacting with other of the devices in the equipment network (e.g., plurality of network-based devices) (see Paragraph [0003]), and other systems (e.g., measurement and automation systems) (see Paragraph [0003]), wherein each one of said plurality of devices includes device configuration means for creating or updating device configuration data (e.g., configuration dialog useful in creating a configuration diagram; discover or manually add new devices) (see Paragraph [0192]), the device configuration data including description of the device (e.g., configuration dialog for creating and specifying a configuration diagram) and representation of interconnection and interaction of the device with other ones of said plurality of devices (e.g., discovering devices connected within the system) (see Paragraph [0295]);

a computer network (e.g., LAN/WAN/Internet) (see Figure 1);

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means connected between said computer network and said plurality of controllers, respectively, for transferring data and/or control signals between individual ones of said plurality of controllers and said computer network at given times (e.g., signals, data or phenomena that is being transferred between the devices) (see Paragraph [0217]); and

auto-discovery means for permitting said SCADA system to both self-configure itself relative to devices in said industrial equipment network (e.g., discovering devices connected within the system) (see Paragraph [0295]), and to be updated relative to changes in the configuration of said industrial equipment, and associated devices or equipment therein (e.g., discover or manually add new devices) (see Paragraph [0192]), including discovering new or changed devices via communication of the device configuration data over said computer network (e.g., discovered devices) (see Figure 14).

As to dependent claim 2, Kodosky teaches the apparatus of claim 1, wherein said plurality of controllers are each provided by a programmable logic controller (e.g., PLCs) (see Paragraph [0003]).

As to dependent claim 3, Kodosky teaches the apparatus of claim 1, wherein said transfer means is selected from the group consisting of a router, and switch (e.g., routers, switches) (see Paragraph [0100] and [0133]).

As to dependent claim 4, Kodosky teaches the apparatus of claim 1, wherein said computer network consists of a local area network (e.g., LAN) (see Figure 1).

As to dependent claim 5, Kodosky teaches the apparatus of claim 1, wherein said auto-discovery means includes:

broadcast means (e.g., discovering devices connected within the system) (see Paragraph [0295]) for operating a controller of a given device (e.g., controllers) (see Paragraph [0003]), that has either changed its configuration or is new to said industrial equipment network (e.g., discover or manually add new devices) (see Paragraph [0192]), to broadcast over said computer network an auto-discovery protocol (e.g., wireless protocols; various standard bus protocols) (see Paragraph [0097] and [0232]); and

server means included in said SCADA system responsive to an auto-discovery protocol from said given device (e.g., wireless protocols; various standard bus protocols) (see Paragraph [0097] and [0232]), for requesting said controller of said given device for the device configuration data to permit said SCADA system to update its configuration for the given device itself and within the industrial equipment network (e.g., discovered devices) (see Figure 14).

As to dependent claim 6, Kodosky teaches the apparatus of claim 1, wherein said auto-discovery means includes:

server means included in said SCADA system and connected to said computer network (e.g., discovering devices connected within the system) (see Paragraph [0295]; and Figure 14), for in a first mode of operation periodically polling respective controllers of all of said plurality of devices in said industrial equipment network for any respective changes in configuration and identification of new ones of said plurality of devices (e.g.,

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discover or manually add new devices) (see Paragraph [0192]), and in a second mode of operation individually requesting each responding one of said plurality of devices for the device configuration data to permit said SCADA system to update its configuration information (e.g., discover or manually add new devices) (see Paragraph [0192]).

As to dependent claim 21, Kodosky teaches the apparatus of claim 1, wherein the device configuration means includes a configuration tool for allowing a user to enter operating parameters of the device, and creating a device configuration file based on the operating parameters (e.g., configuration dialog for creating and specifying a configuration diagram) (see Paragraph [0295]; and Figure 14).

As to dependent claim 22, Kodosky teaches the apparatus of claim 21, wherein the device configuration file is organized as a hierarchy (e.g., hierarchy) (see Paragraph [0012]).

As to dependent claim 23, Kodosky teaches the apparatus of claim 1, wherein the plurality of controllers are configured such that the device configuration data (e.g., controllers) (see Paragraph [0003]), in its entirety, is communicated to said SCADA system (e.g., supervisory control and data acquisition) (see Paragraph [0125]) while only relevant part of the device configuration data is communicated to other ones of said plurality of devices in the equipment network (e.g., distributed system) (see Paragraph [0125]).

Response to Arguments

6. Applicant's arguments filed December 15, 2008 are moot in light of new grounds of rejections. This office action is made non-final due to the introduction of at least one new grounds of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Deter, S., "Plug and Participate for Limited Devices in the Field of Industrial Automation" Emerging Technologies and Factory Automation, October 2001, Pages 273-278 vol. 1

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tejal J. Gami whose telephone number is (571) 270-1035. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert DeCady/
Supervisory Patent Examiner, Art
Unit 2121

/TJG/